Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.–3. (Canceled)

4. (Withdrawn) The method according to claim 1, wherein the binding is non-covalent.

5-7. (Canceled)

8. (Withdrawn) A compound for desorbing analyte from solid or liquid state into gas phase, comprising photon energy absorbing motif and binding motif that can bind with the said analyte .

9. (Withdrawn) The compound of claim 8, wherein the binding is covalent.

10. (Withdrawn) The compound of claim 8, wherein the binding is non-covalent.

11. (Withdrawn) The compound according to claim 8, wherein the binding motif is a chemical group having affinity for the said analyte molecules.

12. (Withdrawn) The compound according to claim 8, wherein the binding motif is a reactive chemical group that can form covalent bond with the said analyte molecules.

13. (Withdrawn) The compound according to claim 8, wherein the photon energy absorbing motif and binding motif are of more than one unit.

14. (Withdrawn) The compound according to claim 8, which further comprises a carrier that conjugate the photon energy absorbing motif and binding motif.

15. (Withdrawn) The compound according to claim 14, wherein the carrier is polymer.

16. (Withdrawn) The compound according to claim 11, wherein the affinity group is selected from a group including metal ions, proteins, peptides, antibodies, antigens, nucleic acids, peptide nucleic acids, carbohydrates, lectins, dyes, small molecules, macromolecules and combination thereof.

17. (Withdrawn) The compound according to claim 8, is immobilized on a solid support.

18. (Canceled)

19.-24. (Canceled)

25. (New) A method for desorbing analyte molecules from a sample presenting surface, comprising:

providing a photon energy absorbing molecule selected from the group consisting of 2,5-Dihydroxybenzoic acid-NHS ester, alpha-Cyano-4-hydroxycinnamic acid -NHS ester and 3-Picolinic acid-NHS ester;

mixing and incubating said photon energy absorbing molecule with a sample solution containing said analyte molecule thereby forming a covalent complex between said analyte molecule and said photon energy absorbing molecule; and

exposing said complex deposited on the sample presenting surface, to a laser source to desorb the analyte molecule or the complex from said surface.

26. (new) The method according to claim 25 wherein said NHS ester is sulphated.

27. (new) The method according to claim 25 wherein said photon energy absorbing molecules are immobilized on solid support.

28. (new) The method according to claim 25 wherein said photon energy absorbing molecules are used in combination with additional matrix.

29. (New) A method for desorbing analyte molecules from a sample presenting surface, comprising:

providing a photon energy absorbing molecule, wherein the photon energy absorbing molecule comprises a photon energy absorbing moiety and a reactive group

selected from the group consisting of anhydride, active ester, aldehyde, alkyl halide, and acid chloride;

mixing and incubating said photon energy absorbing molecule with a sample solution containing said analyte molecule thereby forming a covalent complex between said analyte molecule and said photon energy absorbing molecule; and

exposing said complex deposited on the sample presenting surface, to a laser source to desorb the analyte molecule or the complex from said surface.

30. (New) The method of claim 29, wherein the analyte molecule has a functional group selected from the group consisting of amino, hydroxyl, and SH.

31. (New) The method of claim 29, wherein the photon energy absorbing molecule has a reactive group which is an active ester.

32. (New) The method of claim 31, wherein the photon energy absorbing moiety is a residue of an acid selected from the group consisting of 2,5-Dihydroxybenzoic acid, alpha-Cyano-4-hydroxycinnamic acid, and 3-Picolinic acid.